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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,886	03/02/2004	Andreas Nass	HARTING P202-37	2640
27667	7590	08/05/2004	EXAMINER	
HAYES, SOLOWAY P.C. 130 W. CUSHING STREET TUCSON, AZ 85701			ESTRADA, ANGEL R	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/790,886

Applicant(s)

NASS ET AL.

Examiner

Angel R. Estrada

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/6/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. All of the foreign references listed on the information disclosure statement (IDS) filed on May 6, 2004 have not been considered because there is no abstract or translation in English (37 CFR 1.97, 1.98 and MPEP § 609).

Specification

2. Content of Specification

- (a) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. **This item may also be titled "Technical Field."**
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. **This item may also be titled "Background Art."**
- (b) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

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- (c) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (d) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

3. The disclosure is objected to because of the following informalities: In page 2 line 10, states " Advantageous embodiment of the invention are defined in claims 2-8", this statement should be deleted because claims 2-8 were deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that

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the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9-11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dinh (US 6,180,882) in view of Young et al (US 5,679,924, hereinafter Young).

Regarding claim 9, Dinh discloses a screwed cable gland (see figure 1) that is screwed on a cable connection piece (14) of a plug connector housing (see figure 1), wherein the screwed cable gland (see figure 1) comprises a screw element (36) that is composed of two joinable parts (38,46), on which an outside thread (56) is provided, wherein the parts (38,46) encompass a cable (12) that is inserted into the cable connection piece (14), in that the cable connection piece (14) is provided with a thread (16), into which the screw element (36) can be screwed, and the cable connection piece (14) has a shoulder (22) that is adjoined by a slotted sealing element (26 or see figure 5 and 6) that encompasses the cable (12) and is compressed when the screw element is screwed into the cable connection piece (14 or see figures 5, 6); but Dinh lacks the plug connector housing comprising two interconnectable shells that are centrally portioned in the longitudinal direction. Young teaches a plug connector

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housing (see figure 2) comprising two interconnectable shells (16,18) that are centrally portioned in the longitudinal direction, and the plane of the partition extends through the center of a cable connection piece (28, see figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make Dinh's plug connector housing as two interconnectable shells as taught by Young to ease the fabrication of the plug connector housing and to reduce the manufacturing cost.

Regarding claim 10, Dinh discloses the screwed cable gland (see figure 1), wherein the plane of partition of the parts (38, 46) of the screw element (36) contains integral round pins (40, 48) that are respectively arranged on opposite sides and oriented in the screwing direction (see figure 1), wherein said round pins (40,48) engage into corresponding recesses (44, 50) and come in contact with a limit stop (see figure 1, notice the hidden lines that define the bottom of aperture 44).

Regarding claim 11, Dinh discloses the screwed cable gland (see figure 1), wherein the plane of partition of the parts (38,46) of the screw element (36) contains a guide with a tongue (40,48) and a groove (44,50), that are respectively arranged on opposite sides (see figure 1) and oriented in the screwing direction, wherein the tongue (40,48) comes in contact with a limit stop (see figure 1, notice the hidden lines that define the bottom of aperture 44); but Dinh lacks that guide having a dovetail shape. It would have been an obvious matter of design choice to change the shape of the guide from a round shape to a dovetail shape, since such a modification would have involved a mere change

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in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *Span-Deck Inc. V. FabCon, Inc.*, 215 USPQ 835.

Regarding claim 13, Dinh discloses the screwed cable gland (see figure 1), wherein the parts (38, 46) of the screw elements (36) can be pushed together radially with the aid of positive guides (40, 48 or see figure 1).

Regarding claim 14, Dinh discloses the screwed cable gland (see figure 1), wherein the sealing element (26) is in the form of a flexible slotted ring (see figure 1).

Regarding claim 15, Dinh discloses the screwed cable gland (see figure 1), wherein thrust washers (26, 32) in the form of slotted rings (see figure 1) are provided to both sides of the sealing element (see figures 1, 5 and 6).

Regarding claim 16, Dinh discloses the claimed invention except for the screw elements (38,46) having a hexagonal shape. It would have been an obvious matter of design choice to change the shape of the screw element to a hexagonal shape, since such a modification would have involved a mere change in the shape of a component. Where the instant specification and evidence of record fail to attribute any significance (novel or unexpected results) to a particular shape, a change of shape is generally recognized as being within the level of ordinary skill in the art. *Span-Deck Inc. V. FabCon, Inc.*, 215 USPQ 835.

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5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dinh (US 6,180,882) in view of Young et al (US 5,679,924, hereinafter Young) as applied in claim 9, and further in view of Streit (US 6,211,465).

Regarding claim 12, the modified Dinh discloses the screwed cable gland (36) wherein the plane of partition contains pins (48,40) that are respectively arranged on opposite sides (see figure 1) and engage into depressions (44,50); but Dinh lacks the parts (38,46) of the screw element (36) being held together by means of a hinge and wherein snap-in elements are provided to hold together the screw elements. Streit teaches a screwed cable gland (10) comprising two joinable part (12, 30), the parts are held together by means of a hinge (36), wherein the plane of partition contains a pin (33) that engage into depression (13) and wherein snap in elements (34,14; 35,15) are provided to hold together the screw elements (see figures 3 and 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the modified Dinh's screw element with a hinge and snap in elements as taught by Streit to provide means that would firmly hold and secure the two parts of the screw element together.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hsu (US 6,431,215), Nakamura (US 5,257,763), Burkitt (US 3,224,796), Petranto (US 4,343,496), Drbal (US 4,940,249), Clayton et al (US 5,406,032), Moreau (US 6,394,464) and Brandon, Jr. (US 3,041,088)

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disclose a two part screwed cable gland. Perrault (US 4,379,204) discloses a screwed cable gland.

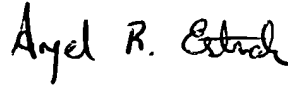
7. Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AE

August 4, 2004


Angel R. Estrada
Patent Examiner
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